

Design Engineering's index for 1965

Assembly

Self-drilling screws pierce cost barrier	Jan. 36
Ways to join sheet metal with screws	Jan. 38
Meet Canada's fastener industry chief	Jan. 39
What you should know on adhesive joints	Jan. 40
Editorial: "The price of assembly"	Jan. 25
What's new in fasteners? Major round-up under 10 product headings	Jan. 47
Combining castings by welding for better design	May 74
Design clamps to cut machining time	Aug. 35

Drawing office

Editorial: "Changes in the drawing office"	Feb. 43
Quebec firm applies statistical drafting control	Feb. 48
Want draftsmen? You must take a trip	Feb. 50
How computers are becoming draftsmen	Feb. 52
Cost cutting policy for drawing offices	Feb. 54
Canada gets first drawing instrument plant	Feb. 55
Drafting methods for technical manuals	Feb. 59
1965 Drawing office buyers' guide	Feb. 62
Progress with computer-aided design	Aug. 38
New redraft methods yield big savings	Aug. 44

Electrical

How to select gearmotors	March 52
What's new in gearmotors	March 54
Motors are coming in smaller frames	June 42
Some do's and don'ts with limits switches	June 42
Which time delay? Here's a guide	June 46
What's new in switches	June 48
The integrated circuit revolution	Nov. 38
Toronto IEEE show and conference	Nov. 46
New electrical diagramming method	Nov. 50
Two inventions looking for manufacturers	Nov. 53

Fluid power

Hydraulics course 4—Dirt and its removal	Jan. 34
Hydraulics course 5—Pumps	March 50
Hydraulics course 6—Pump performance factors	April 52
Hydraulics course 7—Types of pump application	May 70
Hydraulics course 8—Output end of the circuit	June 40
Hydraulics course 9—Motor controls	July 72
Hydraulics course 10—A long look down the pipe	Aug. 42
Fluid amplifiers slash control costs	July 66
How to keep air out of the system	July 75
Canada's Fluid Power Buyers' Guide	July 78
Modern air circuits need new symbols	July 94
Fire-resistant fluids selection guide	July 147
Magnets detent 4-way air valve	Aug. 47
Course on basic pneumatics 1—laws, air distribution	Nov. 48
Fluidic devices enter automation	Dec. 64
Course on basic pneumatics 2—air conditioning	Dec. 66

Materials

Extrusions can offer bright new ideas	Jan. 42
Editorial: "Need for human reinforcements"	May 51
Whiskers—next breakthrough in materials	May 52
Some recent developments in metals	May 56
Flame plating beefs up metal properties	May 61
Plastics conquer new fields	May 62
Reinforced plastics in Montreal's Metro	May 65
Basic design with reinforced plastics	May 66
High tensile steel in hopper cars	May 69
How continuous filaments strengthen FRP	Aug. 30
Polysulfone: Major plastics breakthrough	Sept. 52
Basic facts about fast-gaining ABS	Nov. 56

Mechanical power transmission

How to select the right gearmotor	March 52
What's new in gearmotors	March 54
Canadian coupling uses rubber balls	Oct. 55
All wheels drive articulated amphibian	Oct. 56
Twenty different ways of using roller chain	Oct. 58
Failure is not always the bearing's fault	Oct. 61
Gear tooth design for tomorrow's loads	Oct. 62
Get your bearings on ball and roller types	Oct. 66
Factors in the selection of oil seals	Oct. 68
Canada's Mechanical Power Buyer's Guide	Oct. 71
BC lab develops dynamic torque meter	Nov. 54

Backlaugh



"There must be other methods a firm can use to hang on to its draftsmen."

Miscellaneous

Not everyone thinks Quebec Act a victory	Jan. 30
'Instant designer' business mushrooms	Feb. 56
World standards discussed at New Delhi	Feb. 58
Editorial: "Aid for product development"	March 37
What's ahead for the Engineering Institute of Canada?	March 38
How the EIC views its position	March 40
How technical society co-operation is developing	March 41
Why design engineers make mistakes	March 46
Winnipeg firm revamps design thinking	March 48
Editorial: "The second decade"	April 39
Canadian turbine threatens diesels	April 40
Mobile rig treats 150 trees per hour	April 48
How industrial designers are thinking	April 50
Ballistic travel proposed for 1980's	April 60
Toronto exhibit linked art and engineering	April 68
Design data: Uniform elastic springs	June 54
How to avoid being mentally drowned	June 36
How engineers are educated in Russia	July 60
Ottawa's tech-aid program	July 63
Piercing machine penetrates US market	July 70
Sput of steam lifts hovercraft	July 145
Editorial: "Another form of bilingualism"	Aug. 29
Stylish trains will serve vibrant city	Aug. 32
What Design '67 is all about	Aug. 41
How to make nomograms by construction	Sept. 36
Why we should avoid creative thinking	Sept. 40
Beginner's guide to patent procedure	Sept. 44
How a research association works	Sept. 46
Ways to cut costs in stamping design	Sept. 48
Coanda effect to ventilate Welland tunnel	Sept. 54
Philosophy of design for fun	Sept. 55
He-men will have hydraulic muscles	Sept. 39
Editorial: "Need for education alignment"	Nov. 37
What's happening in the job market	Nov. 42
Trends in the design of machine tools	Dec. 48
Montreal firm puts us on world NC map	Dec. 50
How magnets can solve materials handling problems	Dec. 53